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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,218

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EXAMINER

ZHU, WEIPING

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,218	Applicant(s) SASAI ET AL.	
	Examiner WEIPING ZHU	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 8-12 are currently under examination, wherein all the claims have been newly added in applicant's amendment filed on January 15, 2009. Claims 1-7 have been cancelled in the same amendment. Applicant's affirmation of the election without traverse of Invention I, Claims 1-4 in the reply filed on January 15, 2009 has been acknowledged.

Status of Previous Rejections

2. The previous rejections of claims 1-4 under 35 U.S.C. 103(a) as stated in the Office action dated July 17, 2008 have been withdrawn in light of applicant's amendment filed on January 15, 2009.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 and 12 are indefinite because they depend on cancelled claims 1-3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-065647 A in view of JP 2003-268435 A.

With respect to claims 8-12, JP ('647 A) discloses a cold rolled steel sheet comprising by weight (abstract) less than 0.003% of C, less than 0.1% of Si, 0.05-0.4% of Mn, less than 0.05% of P, less than 0.05% of S, less than 0.004% of N, 0.02-0.1% of Ti, less than 0.06% of Al, 0.002-0.04% of Nb, 0.0001-0.001% of B and the balance of Fe and inevitable impurities.

JP ('647 A) does not disclose the steel sheet comprises La+Ce+Nd as claimed in the instant claim 1. However, it is noted that the instant claim 1 does not limit the contents of La, Ce and Nd individually, indicating that there is no limitation of the presence of all the three elements. Therefore, it is the examiner's interpretation that the presence of any one of La, Ce or Nd in the claimed content range would meet the claim limitation of the content of La+Ce+Nd. JP ('435 A) discloses adding 0.0001-0.01 wt. % of Nd to thin steel sheets (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add 0.0001-0.01 wt. % of Nd to the composition of JP ('647 A) as disclosed by JP ('435 A) in order to decompose the small

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amount of dissolved oxygen and TiO_n inclusion left in the steel melt after the Ti deoxidation as disclosed by JP ('435 A) (abstract).

JP ('647 A) does not limit the types of Ti and Al as claimed. However, it would have been obvious to one of ordinary skill in the art to use claimed acid soluble Ti and Al with an expectation of success, because JP ('647 A) discloses the same utility of all types of Ti and Al. The content ranges of the elements of JP ('647 A) in view of JP ('435 A) overlap the claimed content ranges of the elements respectively. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05 I.

JP ('647 A) in view of JP ('435 A) does not disclose the structures and properties of the steel sheet as claimed in the instant claims 8-10. However, it has been held where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established; see *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977), MPEP 2112.01 [R-3] I. In the instant case, the claimed and JP ('647 A) in view of JP ('435 A)'s steel sheets are identical or substantially identical in composition and are produced by identical or substantially identical processes, therefore a prima facie case of obviousness exists. The same complex oxides, the same oxysulfites, the same $\text{Ti}_4\text{C}_2\text{S}_4$, the same average grain size of recrystallized grains, the same aspect ratio of the recrystallized grain size and the same elongation would be expected in the steel sheet of JP ('647 A) in view of JP ('435 A) as in the claimed steel sheet.

Response to Arguments

5. The applicant's arguments filed on January 15, 2009 have been fully considered but they are not persuasive.

First, the applicant argues that JP ('647 A) is directed to a twice cold rolling and twice annealing process while the instant invention is carried out with only one cold rolling and one annealing. In response, the examiner notes that even though the product claims 8-12 are limited by and defined by the process, determination of patentability is based on the product itself. JP ('647 A) in view of JP ('435 A) discloses a steel sheet, which reasonably appears to be only slightly different than the respective claimed products in claims 8-12. A rejection based on section 103 of the status is thus eminently fair and acceptable. See MPEP 2113. Furthermore, it is noted the process as disclosed by JP ('647 A) is substantially identical to the process of the instant invention. The twice cold rolling and twice annealing process of JP ('647 A) obviously includes the one cold rolling and one annealing process of the instant invention.

Second, the applicant argues JP ('647 A) does not disclose the structures and properties of the steel sheet as claimed. In response, the examiner notes the application of *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977), as stated above renders the rejection proper and maintained.

Third, the applicant argues that JP ('435 A) does not disclose the S and Ti contents as claimed. In response, the examiner notes that the ground of rejections of the claimed S and Ti contents relies on the teaching of JP ('647 A) rather than that of JP ('435 A).

Fourth, the applicant argues that JP ('435 A) does not disclose an annealing step after the cold rolling step. In response, see examiner's response to applicant's 1st argument above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Wyszomierski/
Primary Examiner
Art Unit 1793

WZ
4/6/2009